



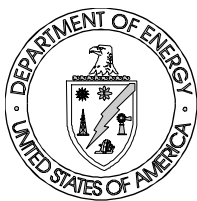
**U.S. Department of Energy  
Technical Qualification Program**

# ***Technical Training Topical Area***

## **Study Guide**

<p><b>Section 4.0</b> <b>Management, Assessment, and Oversight</b></p>
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**August 1996**



**Competency 4.3** Technical training personnel shall demonstrate the ability to plan, conduct and document an evaluation of a technical training and qualification program activity (e.g., monitor an oral examination, evaluate an OJT session, review the content of a training course).

**1. Supporting Knowledge and/or Skills**

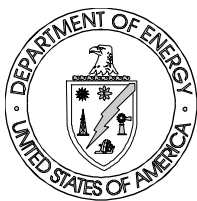
- a. Establish the criteria to be used as a basis for conducting the evaluation.
- b. Develop a checklist or guidesheet to assist in performing and documenting the evaluation or the activity.
- c. Evaluate the activity.
- d. Document the results of the evaluation using a performance checklist or surveillance guidesheet.
- e. Report the results of the evaluation to facility management and DOE management as appropriate.

**2. Self-Study Activities (corresponding to the intent of the above competency)**

NOTE: • Below are two web sites containing many of the references you may need.

Web Sites		
Organization	Site Location	Notes
Department of Energy	<a href="http://cted.inel.gov/cted/index.html">http://cted.inel.gov/cted/index.html</a>	DOE Standards, Guides, and Orders.
U.S. House of Representatives	<a href="http://law.house.gov/cfr.htm">http://law.house.gov/cfr.htm</a>	Searchable Code of Federal Regulations

**Read** Sections 4.4.1, 5.2.2, 5.2.3, 6.1.2, and pages 39-40, 49, 54-58, of DOE-HDBK-1078-94, U.S. Department of Energy *Training Program Handbook: A Systematic Approach to Training*.



**Read** Section 5, pages 5-1 through 5-28, of *The Occasional Trainer's Handbook*.

**EXERCISE 4.3-A** Review Attachments 28, 29, 34, 35, 39, 41, and 42 of DOE-HDBK-1078-94, U.S. Department of Energy *Training Program Handbook: A Systematic Approach to Training*.

**EXERCISE 4.3-B** Complete the exercises listed in Section 5.0 of *The Occasional Trainer's Handbook*.

### 3. Summary

Evaluation of a technical training and qualification program activity typically includes the following criteria, as a minimum:

Criteria	Applications
Are the materials prepared at a level of skills and knowledge appropriate to the trainees?	Determine whether material content can be related to expected entry-level skills and knowledge, including appropriate reading level of the trainees.
Are the materials clearly written and presented so the trainee can complete the required learning activities?	Determine whether selected trainees can use the materials and complete the learning activities.
Do the materials reflect the learning objectives of the desired program?	Assess the material, comparing the learning objectives to those of the desired program, and determine which learning objectives are not covered adequately.
Are the materials consistent with other materials used in the training program or the mastery of the learning objectives?	Analyze sets of materials to determine whether they are supportive and provide an effective progression of learning.
Do the materials conform to the learning activities of the desired program?	Analyze the materials, comparing the learning activities to those of the desired program. Identify any deficiencies.
Are the materials practical for use in the given facility situation?	Determine whether the materials can be used in facilities with available equipment, time, and space, and with the number of trainees planned.



#### **4. Exercise Solutions**

EXERCISE 4.3-A      Review Attachments 28, 29, 34, 35, 39, 41, and 42 of DOE-HDBK-1078-94, U.S. Department of Energy *Training Program Handbook: A Systematic Approach to Training*.

ANSWER 4.3-A      None required.

EXERCISE 4.3-B      Complete the exercises listed in Section 5.0 of *The Occasional Trainer's Handbook*.

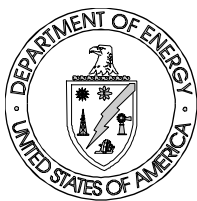
ANSWER 4.3-B      None required.



**Competency 4.4** Technical training personnel shall demonstrate the ability to plan, conduct and document an overall evaluation of a technical training and qualification program and report those results to management in a concise and effective manner.

**1. Supporting Knowledge and/or Skills**

- a. Establish the criteria to be used as a basis for conducting the evaluation.
- b. Establish points of contact with the organization being evaluated.
- c. Gather information pertinent to the evaluation by reviewing training materials, interviewing personnel, observing training activities and reviewing training records.
- d. Document the results of the data collection phase in field notes.
- e. Compare the results of the review phase with the criteria established for the evaluation and determine if deficiencies exist.
- f. Document the results of the overall training and qualification evaluation in a formal written report which includes the status of meeting the established criteria, identifies deficiencies or good practices, and suggests recommendations for improvement.
- g. Resolve conflicting or inconclusive observations or findings obtained from other evaluators on an evaluation team.
- h. Verbally report the results of the evaluation to contractor facility management and DOE management.
- i. Perform follow-up activities as applicable to ensure implementation of corrective actions, including tracking and close-out.



## 2. Self-Study Activities (corresponding to the intent of the above competency)

NOTE: • Below are two web sites containing many of the references you may need.

Web Sites		
Organization	Site Location	Notes
Department of Energy	<a href="http://cted.inel.gov/cted/index.html">http://cted.inel.gov/cted/index.html</a>	DOE Standards, Guides, and Orders.
U.S. House of Representatives	<a href="http://law.house.gov/cfr.htm">http://law.house.gov/cfr.htm</a>	Searchable Code of Federal Regulations

**Read** Sections 2.7, 3.4, and 5.11, pages 6 through 8, 14 through 15, and 28 through 29, of DOE-STD-1056-93, U.S. Department of Energy Standard, *Guide to Good Practices for Line and Training Manager Activities Related to Training*.

**Read** Sections 5.3, 6.0, and 7.0, pages 9 through 16, of DOE-STD-1070-94, U.S. Department of Energy Standard, *Guidelines for Evaluation of Nuclear Facility Training Programs*.

**Read** pages 53 through 63 of DOE-HDBK-1078-94, U.S. Department of Energy Handbook, *Training Program Handbook: A Systematic Approach to Training*.

EXERCISE 4.4-A      Review the appendix of DOE-STD-1070-94, U.S. Department of Energy Standard, *Guidelines for Evaluation of Nuclear Facility Training Programs*.

EXERCISE 4.4-B      Review Attachment 48 of DOE-HDBK-1078-94, U.S. Department of Energy *Training Program Handbook: A Systematic Approach to Training*.

## 3. Summary

The facility's training organization and programs should be evaluated periodically to determine whether they are achieving the established goals and objectives. The effectiveness of training programs to produce qualified personnel should also be evaluated periodically. This should be accomplished by reviewing operating occurrences, interviewing job incumbents and first-line supervisors, observing operations, etc. The results of these evaluations, if used correctly, will help ensure a facility of safe, efficient, and reliable operations.



The following considerations should be emphasized when evaluating training and qualification programs:

- The responsibility for monitoring indicators, analyzing data, and approving revisions is clearly defined.
- The training department is alerted to facility operating, maintenance, and industrial safety experiences.
- Communication on training effectiveness occurs between plant supervisors and the training department.
- Employee opinion of the equality and effectiveness of training is collected periodically.
- The training department is alerted to employee performance errors.
- The training department meets with maintenance and operations supervisors and engineers to determine potential training problems.
- Training uses facility inspection and evaluation reports to guide program revisions.
- Facility modifications and procedure changes are monitored for training consequences.
- Training monitors industry operating and maintenance experiences for program impacts.
- Regulatory changes are reviewed for training consequences.
- Program performance data are analyzed.
- Proposed changes are reviewed by appropriate facility and training personnel.
- Training changes are tracked.

#### **4. Exercise Solutions**

EXERCISE 4.4-A      Review the appendix of DOE-STD-1070-94, U.S. Department of Energy Standard, *Guidelines for Evaluation of Nuclear Facility Training Programs*.

ANSWER 4.4-A      None required.

EXERCISE 4.4-B      Review Attachment 48 of DOE-HDBK-1078-94, U.S. Department of Energy *Training Program Handbook: A Systematic Approach to Training*.

ANSWER 4.4-B      None required.